

The University of Manchester

News for Schools

The University of Manchester teacher's newsletter



"Winner of the Widening Access Initiative Award 2014"

The University of Manchester Gateways Programme is the University's flagship Pre-16 Widening Participation initiative which targets local learners in Years 7-11 who are statistically less likely to progress to university for a variety of reasons. It delivers a coherent and progressive series of subject enrichment and higher education awareness activities, as well as providing important information, advice and guidance (IAG) on different potential HE course choices and careers. The 43 Greater Manchester schools participating in the programme are given the opportunity to attend campus visits with a small number of talented learners who have the ability to progress into higher education.

New Academic Year

Year 10 Exploration Visits

To begin the series of events that take place throughout the academic year, the Gateways programme got off to a great start in September with its first set of Year 10 Exploration Visits. The Year 10 days focussed primarily on transferable

skills and their significance for learners throughout their educational journey and chosen career pathway. The learners participated in a Journey through Education' activity which allowed them to consider their future options and research university courses of interest to them with the help of prospectuses and online resources.

This year, the Gateways team and Manchester Museum collaborated to create a new, more interactive session for the Year 10 days. Learners were split into teams to create a new digital exhibition for a specific target audience at Manchester Museum before presenting their ideas back to the group. This activity helped develop their teamwork, communication and creativity skills, as well as showcasing the variety of careers available in a cultural institution like Manchester Museum

Year 11 Skills for Success Visits

At the Year 11 days, learners were exposed to a variety of different university learning styles through completing a group based research task on a topical issue. This provided pupils with the opportunity to experience the nature of both group and independent study at a researchintensive and selective university like Manchester. This year, students listened to a short lecture on nuclear disasters before undertaking research to answer questions related to one of the following subject areas: Environmental Science, Disaster Management and Humanitarian Response, Economics and Health Care. These topics then formed the basis of a presentation where each group shared their findings in very creative ways. One group from each day even won a prize!

Date for the diary!

We will be hosting our Gateways Celebration Event on Wednesday 28th February, 2018 all teachers, parents, carers and families, as well as our Gateways learners in Year 9-11, are invited to attend

More information regarding location and timings will be sent out in the New Year but please save the date in your diary for this special event!

Contact: Naomi Roussak Tel: 0161 275 8573

Email: gateways@manchester.ac.uk www.manchester.ac.uk/gateways

GATEWAYS

The University of Manchester teacher's newsletter

FORTHCOMING EVENTS AND PROGRAMMES

Greater Manchester Higher

Greater Manchester Higher is a collaborative network of higher education providers from across Greater Manchester, who are working together to provide high quality, impartial information, advice and guidance about progression routes to higher education (HE) for learners and their key influencers at all state schools and colleges in Greater Manchester

Greater Manchester Higher is also one of 29 organisations to have secured Government funding via the National Collaborative Outreach Programme (NCOP). The NCOP mission is highly targeted at Year 9-13 learners from specific electoral wards where there is lower than expected progression into Higher education (based on GCSE attainment). This work will contribute towards the Government's goal of doubling participation in Higher education among those deemed to be from 'disadvantaged backgrounds.'

Our free programme of collaborative activities includes campus visits, in school activities, targeted events for Looked After Children, disabled learners, (including those with learning difficulties, mental health and long-term health conditions) and young carers, and a programme of CPD activity for teachers and carers.

Additional activities for NCOP learners include mentoring, summer schools and subject-specific taster days.

Booking is now open for our Year 8-9 and Year 10 campus visits which take place throughout the academic year hook online at

http://bit.ly/GMH_campusvisits_Pre16

We endeavour to provide clear access to information about outreach activities offered by higher education providers in Greater Manchester for teachers and advisors through our website: www.gmhigher.ac.uk which has a searchable database of over 50 free activities offered by our network partners, including campus visits, subject enrichment activities, IAG events and teacher and adviser CPD, with new activities being added on a regular basis. Our website also contains resources for teachers and advisers, learners and parents and carers.





The network includes: University of Bolton, The University of Manchester, Manchester Metropolitan University, RNCM, University of Salford, Ashton Sixth Form College, Bolton College, Bury College, Holy Cross College, Hopwood Hall, The Manchester College, Salford City College, Stockport College, Tameside College, Trafford College, University Campus Oldham and Wigan and Leiah Colleae.

Contact: Greater Manchester Higher Tel: 0161 247 1019 Email: gmhigher@mmu.ac.uk

www.gmhigher.ac.uk

Prospective Student and Parent/Carer Event (Y10-12)

Thursday 15th February 2018, The University of Manchester

This early evening event hosted at The University of Manchester will cover the range of pastoral and financial support available at university including Disabled Student's Allowance. The highlight will be a Q&A with current HE students who have disabilities. There will be a range of information stands to enable attendees to find out more about the support available from HEIs and the third sector.

Contact: Greater Manchester Higher Tel: 0161 275 7546 Email: gmhigher@mmu.ac.uk

www.gmhigher.ac.uk

Guided campus visits for secondary school groups

The University welcomes campus visits from The campus tour includes our Students' secondary school groups who wish to get a taste of university life, find out more about higher education and gain an insight into student life at Manchester

The visits take place between 11am and 1pm on a selection of dates and feature the following activities:

- Welcome presentation
- Student ambassador Q&A session
- · Campus tour

The welcome presentation provides information about higher education in general and explores why people go to university and how decisions your pupils make at this stage of their education will impact their future, as well as giving an insight into student life.

Union, The University of Manchester Library, the Old Quadrangle (the oldest part of the University), some of our teaching buildings and the Manchester Aquatics Centre.

Dates scheduled to visit the campus during the 2017/18 academic year are as follows:

- Thursday, 11 January 2018 (focus on GCSE options)
- Friday, 9 March 2018 (focus on post-16 options)
- Friday, 27 April 2018 (focus on post-16 options)

To book please visit: www.man.ac.uk/6ntPEO

Contact: Sophie Flieshman Tel: 0161 275 5654

Email: sophie.flieshman@manchester.ac.uk

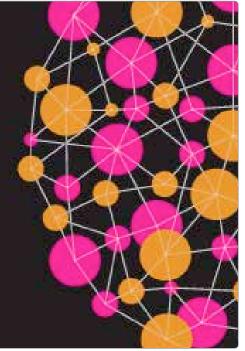
British Science Week 2018

Week event days on Thursday 15 March and Friday 16 March 2018. These event days are jam-packed with activities, starting with attending an interactive workshop led by PhD researchers, then attending a Science Fair with demonstrations from over 25 research groups, and culminating with a lecture delivered by a University of Manchester academic, all designed for your pupils in Years 7 to 9.

Schools can bring up to 25 pupils. There is no charge for this event which runs from 10am to 2.30pm. Pupils will need to bring a packed lunch and wear school uniform.

Limited spaces are available for British Science If you have any further queries about this event or would like to reserve a space for pupils from your school, please email quoting "BSW 2018" in the subject line,

- your school name;
- which day you'd like to attend;
- how many students you'd like to bring and from what year group.



* YOUR PATH TO UNIVERSITY *

Access Manchester

The new Access Manchester website is now live: www.access.manchester.ac.uk

One of the University's goals is to recruit students who will be successful at Manchester regardless of educational or social background. You can encourage your Access Manchester Schemes which aim to inspire and support students from nonprivileged backgrounds to aspire to higher education.

How it works

We have schemes that are just for local students, schemes that are conducted nationally through an online platform and we have a couple of schemes that are for students interested in a specific subject. You can click through each individual scheme to see if any might be suitable for your students.

The benefits learners would receive from undertaking an Access Manchester Scheme include:

- A reduced offer in the A-level grades required to study at The University of Manchester
- Advice and guidance in applying to the University
- The opportunity to complete work
- Familiarity with university life and study

Eligibility

Eligibility requirements vary between schemes and students can check what Access Manchester scheme they might be eligible for using our handy eligibility

Contact: Gemma Oakes **Tel:** 0161 306 2739 Email: gemma.oakes@manchester.ac.uk

Young Persons **University Website**



The Young Persons University website provides information, advice and guidance to secondary school and college students about careers in academic research. It provides a number of self-study challenges based around the main subject disciplines studied at The University of Manchester, as well as information on research pathways and a day in the life of a PhD student.

The blog is also regularly updated to showcase research undertaken by PhD candidates from across the University who work to engage young people with university life and study. Topics covered by our contributors include, 'From Medicine to Medical Virology'; 'The Search for Alternative Energy Sources'; and 'Understanding and resolving economic inequalities in the North of England'.

www.ypu.manchester.ac.uk/blog

FORTHCOMING EVENTS AND PROGRAMMES

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Academic Guest Lectures

The University of Manchester is home to world-class experts in a wide range of academic fields. In order to share our expertise and enrich your curriculum, we offer subject-specific lectures to students in local schools and colleges in a range of academic disciplines.

Where: Most lectures take place in your school or college.

When: You can arrange a date and time that are mutually convenient for you and our academic.

Duration: The guest lecture is approximately one hour.

Cost: All lectures are free of charge.

Location: Schools and colleges must be based within approximately one hour's travelling distance of The University of Manchester. We will try our best to meet your request.

Group size: Minimum 20 students.

To book, visit our Academic Guest Lecture Series webpage: www.man.ac.uk/rY2YEI

"Who killed the Princes in the Tower?"

This unique event will provide students

with an interest in History, Politics, English

or Archaeology, an opportunity to act as

and historical documents to decide who

killed the 'Princes in the Tower'... Richard

III or Henry VI? The event will culminate

in a debate wherein students will have

to persuade a jury of academics who

chamber in our law department.

March 13th and March 15th 2018

Your pupils with an enthusiasm for

Geography will get an overview of the

subject at university level, and will learn

what geographers study and research

on our campus every day. Learners will

Insight into Geography

(same event running twice)

was quilty of this crime in our debating

detectives and use academic sources

- Year 10

March 7th 2018

Why Study Talks

Our 'Why Study?' series of presentations provides up-to-date information, advice and guidance (IAG) to young people, so that they can make informed decisions about their future. They aim to raise awareness of, and aspiration to, some of the most competitive and demanding subject areas in higher education.

We can deliver these presentations at schools based within one hour's drive of The University of Manchester. Talks are flexible and may last from 30 to 45 minutes

To book, visit our Academic enrichment activities webpage:

participate in interactive workshops and

lab activities, and as well as experience

a taster lecture from current academic

Our Law School will provide an overview of

well as two interactive workshops focusing

opportunity to get advice from the School

study, and the diversity of careers available

Email: emma.britain@manchester.ac.uk

Law and the degree courses available, as

on core aspects of the study of Law and

associated subjects. This is an excellent

of Law on what Law students actually

Subject areas explored: Geography

(Human and Physical)

April 24th 2018

to law graduates.

Contact: Emma Britain

www.man.ac.uk/k7KZ4Q

Tel: 0161 275 8924

Insight into Law - Year 9

www.man.ac.uk/gXP0HD

Tel: 0161 206 6506 Email: schoolsandcolleges@manchester.ac.uk

Humanities Academic Enrichment Events

These are just a few questions that our PhD students are working to answer. Email us today to book a talk with one of Biology/Biomedical Sciences at university.

Contact: Charlotte Alcock Tel: 0161 306 1650

Email: charlotte.alcock@manchester.ac.uk www.bmh.manchester.ac.uk/connect/ teachers-advisers

For teachers

with the School-University Partnership Initiative (SUPI)

Would you like to do memorable micro experiments with real animals in your biology lessons? This is feasible with the fruit fly Drosophila on a wide range of topics including genetics, enzymes, nervous system, life cycle and even data analysis and statistics. For a brief overview of the underlying concepts, available topics and uniquely comprehensive support resources see: www.poppi62.wordpress. com/2015/08/28/school-flies. This free CPD event will introduce you to the theory and experiments of our sample lessons. To sign up, please contact using the details

Contact: Sanjai Patel Tel: 0161 275 5628

ACADEMIC SCHOOLS **ACTIVITIES**

Our academic departments also offer a range of activities open to school groups

Faculty of Biology Medicine and Health

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Inspiring tomorrow's researchers

- Why do teenagers need to sleep later than adults?
- What is the long term impact of alcohol on the structure of the liver?
- How can we use fruit flies to understand our own development?
- Does inflammation help or harm the brain after a stroke?

these students, find out more about their research, and inspire your pupils to study

CPD teacher training event in partnership

Thursday, January 25th (9am-4pm) (a) Manchester Fly Facility (M13 9PT)

Email: sanjai.patel@manchester.ac.uk www.droso4schools.wordpress.com



School of Arts, Languages and Cultures

Outreach Activities

The School of Arts, Languages and Cultures comprises 19 subject areas, ranging from History and related disciplines, English and Languages to Drama and Music.

Our upcoming events for schools and colleges include:

- Music Star Lecture (KS5) 5 December 2017
- Shakespeare Star Lecture (KS5) 29 November 2017
- · Cold War Study Day (KS5) 26 January 2018

- MFL events for KS3 (January 2018), KS4 and KS5 (June 2018)
- · Insight days for various subjects, including English Language, RE and Disaster Management (KS5) June 2018
- · Talks and outreach projects held at your school in various subjects

Discover more about these and other activities on our website or get in touch to see if we can help you.

Contact: Sonja Bernhard Tel: 0161 275 3429

Email: Sonja.bernhard@manchester.ac.uk

www.alc.manchester.ac.uk/connect/schools/outreach

Manchester Pharmacy School

Promoting Health in High School Communities

This event is intended to raise awareness of relevant healthcare issues for pupils in year 10-11, and in doing so, help reduce the number of health-related issues for the future generation. Groups of 3-4 third year undergraduate students (all DBS cleared) from Manchester Pharmacy School offer you the unique opportunity to have a 60-90 minute hands-on workshop on one or more of the following topics:

- Sexual Health Awareness
- Smoking Awareness
- · Alcohol Awareness
- Diabetes
- · Antibiotic Resistance Awareness
- Illegal Drugs
- Mental Health
- · Pharmacy careers

The workshops will begin after the Autumn half term and in general, students will be available as follows:

Wednesdays (not January) - 1-4pm

(12.30-1.30pm) may be negotiable

Fridays (from 17th Nov – 15th Dec) – 9-4pm

Fridays (from 20th April – 11th May) – 9-4pm Other times throughout these weeks

For further details or to register your interest in one or more of these workshops, please use the contact details below.

Contact: David Allison Tel: 0161 275 2359

Email: david.allison@manchester.ac.uk

School of Chemistry

Flash Bang Show

This show has been developed over many years and has been delivered throughout the country by a succession of presenters, serving to popularise Chemistry to all age groups. The content is altered to suit, but is particularly suited to Year 9.

The exact details of what is said and done will vary somewhat from presenter to presenter and can be tailored to age group, but in most cases there will be discussions of combustion processes, energy, fuels, the difference between combustion and explosion, the importance of scale and state of division on reactions, colour chemistry and luminescence. This one hour show places more emphasis on entertainment than education.

Contact: Meriel Maddocks

Tel: 0161 306 4686

Email: outreach.chemistry@manchester.

www.chemistry.manchester.ac.uk/ outreach

Free Medical Physics lecture:

"Rise of the Anti-Matter Machines - the past, present and future of Positron Emission Tomography"

In this entertaining lecture, Medical Physicist (and ScienceGrrl founder) Dr Heather Williams introduces her favourite imaging technique, Positron Emission Tomography, from its fundamental principles and initial development to current applications in clinical care and research, before looking ahead to imminent advances and blueskies dreams of the future. This lecture is illustrated with creative demonstrations. real-life examples, and a spot of audience participation

Monday 11th December, 5.30pm-7pm Schuster Building, University of Manchester Aimed at Y10/11 but suitable for Y12/13

Contact: Emma Nichols Tel: 0161 306 8744

Email: emma.nichols@manchester.ac.uk www.physics.manchester.ac.uk/ outreach/christmaslecture2017

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CULTURAL ASSETS



KS3 Ancient History Workshop

Engage students in the role of ancient traders as they travel to Egypt, Canaan and Greece to collect ancient goods and watch the great god Poseidon sink their ships: what wares might survive underwater for thousands of years? Then journey to Roman Manchester to collect evidence for different peoples and activities in the ancient city. This is an excellent opportunity for students to learn how to use primary sources.

Cost: £75 Duration: 1.5hrs **Numbers: 15-20**

Make a booking on our website: www.museum.manchester.ac.uk/learning/makeabooking Contact: Cat Lumb Tel: 0161 306 1765 Email: cat.lumb@manchester.ac.uk

www.manchester.ac.uk/museum/learning

KS3 Skill Enrichment Day

Our enrichment day provides your students with the opportunity to have fun in the Museum and can be tailored to focus on particular subjects areas (Science, Crosscurricular or Literacy) within a specified budget. It aims to increase their curiosity in the world around them and enliven their enthusiasm for learning. The workshops and self-guided activities have been designed to enrich their learning and develop their skills.

Cost: £200-£220 **Duration:** Full or half day Numbers: 45-120

Tel: 0161 306 1764

Email: barinur.rashid@manchester.ac.uk

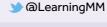
Blog: learningmanchester.wordpress.com

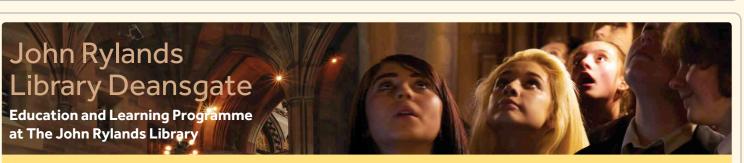
KS3/4 PCR Science workshop

Our workshop provides students with a fascinating insight on how DNA is manipulated to be replicated and amplified using a technique called polymerase chain reaction (PCR). Students are given the opportunity to amplify their own DNA and carry out the polymerase chain reaction technique. This workshop links very closely to the Biology KS4/KS5 and BTEC curriculum. This is an excellent opportunity for students to take part in a widely used DNA technique in forensic science.

Duration: 5hrs Numbers: 20 Contact: Barinur Rashid

Cost: £150-£220





Education workshops and tours

Our workshops for Key Stage 2 to Key Stage 5 include opportunities to learn about Ancient Egypt hieroglyphs; to investigate Manchester's past through historic maps and to use the library's amazing Victorian Gothic building as an inspirational starting point for creative writing.

Guided tours of the building are also available so students can learn about the architecture and history of the library and its world-class. collections of rare books and manuscripts.

Workshops and tours are free.

Contact the Education team or see our webpages for more information.

Reformation Exhibition

Are your students studying the Reformation or the Tudors? Our current exhibition marks the 500th anniversary of Luther's 95 Theses. The exhibition presents an overview of the early years (1517-1547) of the Protestant Reformation and its impact on England through a display of Sixteenth Century printed books related to Martin Luther, Henry VIII and William Tyndale. More information here: www.library.manchester.ac.uk/rylands/ whats-on/reformation

Free entry. The exhibition runs to 4 March.

The Reformation education workshop

Linked to the exhibition this educational workshop for A Level History offers students the opportunity to develop their understanding of the topic by investigating digital reproductions of a selection of texts and images from some of the books on display. The workshop supports learning about the early Tudor period, the Reformation and could also help develop source analysis skills.

The workshop is free. Maximum group size 20 students.

Tel: 0161 306 6558 Email: irl.education@manchester.ac.uk www.library.manchester.ac.uk/rylands/learn



Term-time Education Programme

Our term-time education programme at the Jodrell Bank Discovery Centre offers unique learning experiences for learners aged 5 to 18, at a site of current and world-leading astronomical research. Your learners can get up close to the world famous giant Lovell telescope, as well as explore our exhibitions, and experience up to two of our interactive workshops. A limited number of free places are also available for qualifying schools - see our website for more information!

Contact: Jodrell Bank School Bookings

Tel: 0161 306 9520

Email: jodrelleducation@manchester.ac.uk www.jodrellbank.net/learn/schools

Free outreach for WP schools

The Jodrell Bank Discovery Centre offers a day of free science outreach for KS3 and KS4 students, to Secondary Schools that are eligible for the University of Manchester's Widening Participation programme. For more information, and to see if your school is eligible, visit the link

Contact: Jamie Sloan

Email: jamie.sloan@manchester.ac.uk www.jodrellbank.net/learn/schools/outreach

A-level History: Cold War Day

On 26th January 2018 we are holding a 'Cold War Masterclass Day' for A-level history students. The first job of the Lovell telescope in 1957 was to track the Soviet launch of Sputnik. the world's first artificial satellite. The telescope was subsequently used throughout the Space Race, to track both American and Soviet spacecraft. On this date we will be joined by colleagues from The University of Manchester's Department of History. Students will hear two taster lectures on the Cold War, followed by an interactive workshop to explore Jodrell Bank's role during this time.

Contact: Sonja Bernhard

Email: sonja.bernhard@manchester.ac.uk www.jodrellbank.net/learn/schools/coldwarday

FOR SCHOOLS WITH POST-16 PROVISION

Manchester Access Programme

Recruiting now!

The Manchester Access Programme (MAP) is The University of Manchester's flagship widening participation scheme for local post-16 students who meet specific academic and background criteria. The aim of the programme is to support entry to The University of Manchester, or another research-intensive university, through the completion of a portfolio of work demonstrating specific knowledge and skills. At Manchester we want to recruit students who will be successful at the University regardless of their educational and social background. In view of this, we have developed the Manchester Access Programme to target and support talented students from backgrounds currently under-represented in higher education.

We are hosting a talk about MAP at The University of Manchester on 15th November,

5-6pm, as well as delivering recruitment talks in schools and colleges across Greater

Manchester. This will give any eligible Year 12 students the opportunity to learn more about the programme and its benefits. To book: www.man.ac.uk/QuNV7e

Applications for MAP open on 1st November and close at 5pm, 18th December 2017.

MAP welcomes applications from students with experience in Local Authority Care, Young Carers, students with disabilities, asylum seekers and refugees.

For further information regarding eligibility criteria and the benefits of MAP, please see our website: www.manchester.ac.uk/ undergraduate/map

Contact: Manchester Access Programme Tel: 0161 306 6505 Email: map@manchester.ac.uk



FOR SCHOOLS WITH POST-16 PROVISION



Discover Days

The University of Manchester's Discover Days are informative, interactive events for aspiring undergraduate students who are interested in certain subject areas, but may not know exactly which course to choose. They are ideal for Year 12 students, or for other people applying to university through UCAS and considering Manchester. Discover Days give you real, in-depth insight into the unique features and opportunities of degree courses that you might study at Manchester. You'll gain first-hand experience of university study, learn more about Manchester student life and be able to make informed decisions about your university choices before the UCAS application process starts.

This Autumn, we have four confirmed events:

- Discover Law (Tuesday, 28 November)
- Discover Engineering (Wednesday, 6 December)
- Discover Computer Science (Wednesday, 6 December)
- Discover Planning (Tuesday, 19 December)

Email: discover@manchester.ac.uk www.man.ac.uk/phU138

School of Chemistry

Spectroscopy in a Suitcase

If it's a struggle to get your pupils out of school then why not try booking a free visit from our Spectroscopy in a Suitcase team for your **chemistry** class. We have 2 workshops on offer:

- Paracetamol workshop, Year 12/13 (A level or BTEC) – students will synthesise paracetamol and analyse their samples using a thin layer chromatography and IR spectroscopy on our portable IR spectrometer.
- NMR/IR workshop, Year 13 (A level only) using our portable NMR & IR spectrometers along with elemental compositions students will identify unknown organic compounds.

Alternatively you can borrow our portable IR spectrometer yourself to use in classes for up to a week. You must be able to collect and return it to The University of Manchester.

Contact: Dr Katayune Presland Tel: 0161 306 0563

Email: katayune.presland@manchester.ac.uk

To book a visit or a loan please visit **www.rsc.org/sias** and fill in the online form.

Humanitarian and Conflict Response Institute (HCRI)

Academic Guest Lectures

The 'Academic Guest' programme offers your pupils the opportunity to discover more about our unique BSc course in International Disaster Management and Humanitarian Response through a presentation delivered by our staff and/or students.

Due to the multi-disciplinary nature of the course, this talk is designed for pupils from any discipline but may be of particular interest to pupils studying Modern Foreign Languages, Anthropology, Geography, Sociology, History, Politics and health-related subjects.

We are more than happy to schedule a date and time at your convenience.

Careers in Humanitarianism Day – 2nd February 2018

The 5th annual student-led Careers in Humanitarianism Day is designed to support delegates in making career choices and exploring future plans. The full-day event will be divided into specific themed slots and consists of presentations, discussions and advice from industry leaders within the Humanitarian sector. A lunchtime 'Expo' event will also provide attendees with an opportunity to meet with a representative from organisations working within the humanitarian sector.

International Disaster Management and Humanitarian Response Insight Day

This event will give Year 12 pupils the opportunity to explore our BSc course. At the start of the day, pupils will be given an insight of what to expect from the BSc International Disaster Management and Humanitarian Response from the Programme Director. They will then attend 3 different workshops led by undergraduate/postgraduate students on the themes of; Key Concepts in Humanitarianism, Disaster Management and Global Health. They will also have the opportunity to meet with students studying the BSc course and take an optional tour of The University of Manchester campus.

Bookings will open in spring 2018 via online forms.

To register your interest for any of these events, please email using the contact details below

Contact: Adil Mohammed Tel: 0161 275 0244

Email: hcri-invite@manchester.ac.uk **www.hcri.manchester.ac.uk**



